



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,698	02/03/2004	Ozgur C. Leonard	15437-0601	3805
29989	7590	10/31/2007	EXAMINER	
HICKMAN PALERMO TRUONG & BECKER, LLP			WAI, ERIC CHARLES	
2055 GATEWAY PLACE			ART UNIT	PAPER NUMBER
SUITE 550			2195	
SAN JOSE, CA 95110				
MAIL DATE		DELIVERY MODE		
10/31/2007		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/771,698	LEONARD ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Eric C. Wai	2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 03 February 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-24 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 03 February 2004 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date See Continuation Sheet.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

1. Claims 1-24 are presented for examination.

### ***Information Disclosure Statement***

2. The information disclosure statements filed 10/04/2004 has not been considered by the examiner. The information cited is "related applications. Applicant should place this information in the "related applications" section of the specification for consideration by the Examiner. Correction is required.

### ***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 9-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are directed to a signal directly or indirectly by claiming a medium and the Specification recites evidence where the computer readable medium is define as a "wave" (such as a carrier wave). In that event, the claims are directed to a form of energy which at present the office feels does not fall into a category of invention. The following link on the World Wide Web is for the United States Patent And Trademark Office (USPTO) policy on 35 U.S.C. §101.

Art Unit: 2195

<[http://www.uspto.gov/web/offices/pac/dapp/olla/preognote/guidelines101\\_20051026.pdf](http://www.uspto.gov/web/offices/pac/dapp/olla/preognote/guidelines101_20051026.pdf)>

5. Claims 17-24 recite an "apparatus"; however, it appears that the apparatus would reasonably be interpreted by one of ordinary skill in the art as software, per se, failing to be tangibly embodied or include any recited hardware as part of the system.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Armstrong et al. (US PG Pub No. US 2002/0156824 A1 hereinafter Armstrong).

8. Armstrong was disclosed in IDS date 10/03/2005.

9. Regarding claim 1, Armstrong teaches a machine-implemented method, comprising:

establishing, within a global operating system environment provided by an operating system, a non-global partition which serves to isolate processes running within the non-global partition from other non-global partitions within the global

operating system environment ([0034], wherein hypervisor 202 enforces partitioning of processor resources);

associating a first resource limit with the non-global partition, wherein the first resource limit indicates a maximum amount of a particular resource that can be allocated to the non-global partition ([0034], wherein it is inherent that resource limits be set since the hypervisor enforces partitioning of resources).

10. Armstrong does not explicitly teach associating a second resource limit with a group of one or more processes within the non-global partition, wherein the second resource limit indicates a maximum amount of the particular resource that can be allocated to the group of one or more processes.

11. However, Armstrong teaches that separate operating systems are installed in each one the logical partitions ([0035]). It is old and well known that operating systems may place resource limits on tasks running within the operating system to provide for efficient sharing of resources. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to including associating a resource limit with a group of one or more processes within the partitions. One would be motivated by the desire to share the resources among the various tasks within each partition and prohibit any one task from blocking other tasks from executing.

12. Regarding claim 2, Armstrong teaches that a global partition administrator sets the first resource limit ([0025]).

13. Regarding claim 3, Armstrong teaches that a non-global partition administrator sets the second resource limit ([0036]).

14. Regarding claim 4, Armstrong teaches: receiving a resource allocation request for the particular resource from a process executing in the group of one or more processes; determining an amount of the particular resource that can be allocated; and allocating the determined amount to the group of one or more processes ([0035], wherein it is inherent that processes running under an operating system request resources, and operating systems allocate the resources accordingly).

15. Regarding claim 5, Armstrong does not explicitly teach: calculating an available amount of the particular resource, and wherein if the resource allocation request is less than or equal to the available amount, then the determined amount is set to the amount of the resource allocation request.

16. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to set the determined amount to the amount of the resource allocation request. It is old and well known to allocate resources if such resources are sufficiently available.

17. Regarding claim 6, Armstrong does not explicitly teach wherein if the resource allocation request is greater than the available amount, then the determined amount is set to the available amount.

18. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to set the determined amount to the available amount. It is old and well known to allocate resources to an amount that is available.

19. Regarding claim 7, Armstrong does not teach wherein if the resource allocation request is greater than the available amount, then the determined amount is set to zero.

20. It would have been obvious to one of ordinary skill in the art at the time of the invention to set the determined amount to zero. It is old and well known the deny requests if such requests cannot be completely fulfilled. One would be motivated by the desire to allocate zero resources to the requester is the request could not be completely fulfilled.

21. Regarding claim 8, Armstrong does not teach wherein calculating further comprises: calculating a first amount by subtracting the total amount of the particular resource allocated to the non-global partition from the first resource limit; calculating a second amount by subtracting the total amount of the particular resource allocated to the group of one or more processes from the second resource limit; and setting the available amount to the lower of the first amount and the second amount.

22. It is well known in the art to subtract the amount consumed from the total amount to realize the amount available. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to calculate an available amount using this method and choosing the lesser of the amounts to determine the amount available.

23. Regarding claims 9-17 they are the machine-readable medium and apparatus claims of claims 1-8 above. Therefore they are rejected for the same reasons as claims 1-8 above.

### ***Conclusion***

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric C. Wai whose telephone number is 571-270-1012. The examiner can normally be reached on Mon-Thurs, 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng - Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



MENG-AL T. AN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :05/21/2004, 12/02/2004, 04/25/2005, 09/06/2005, 10/03/2005, 04/18/2006, 09/22/2006, 07/23/2007, 07/25/2007, 09/18/2007.